
Subject: GLCtrl for a newbie
Posted by [giol](#) on Sun, 26 Oct 2014 14:53:22 GMT
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Hello Guys

Starting these last days my first experience with Ultimate, I'd like to thank you very much for your great job.

But, instead of simple speaking about the problem of a newbie, I think much better to show you my start with Theide by images.

So, my first hard experience as non skilled user started only when I tried to treat the OpenGL packages in the "reference" assembly, after some examples well compiled without problems.

Maybe it's not irrelevant to inform you about my best interests on the 3D graphics.

So, now, by images, these are the first hitches for a newbie:

First error...Avoided:

Second error...I tried many versions, but the follow is my only one.

At last...The GLDrawDemo starts:

I work with the last Cinnamon Linux Mint 17 - Qiana (Ubuntu Trusty Tahr 14.04), GCC 4.8.2 and NVIDIA UNIX x86_64 Kernel Module 331.38.

It's all by now, until next time when I'll talk about the more complicated experience with Ultimate and OCE (Opencascade).

Thank you Guys.

Bye.

Giol

File Attachments

1) [1-2.jpg](#), downloaded 958 times

- OpenGL
- Core
- CtrlCore
- Draw
- GLCtrl
- RichText
- plugin/bmp
- plugin/png
- plugin/z
- <prj-aux>
- <ide-aux>
- <temp-aux>
- <meta>

GLCtrl.h GLCtrl.cpp

Symbol/lineno (Ctrl+C)

All

- GLCtrl
- GLCtrl::GLPane

GLCtrl

- GLResize(int w, int h) :
- StdView() : void

GLCtrl::GLPane

- MouseEvent(int event,

GLCtrl

- Pick(int x, int y) : Vector

```
#include "GLCtrl.h"

NAMESPACE_UPP

void GLCtrl::GLResize(int w, int h)
{
    glViewport(0, 0, (GLsizei)w, (GLsizei)h);
}

void GLCtrl::StdView()
{
    glShadeModel(GL_SMOOTH);
    glClearColor(0.0f, 0.0f, 0.0f, 0.5f);
    glClearDepth(1.0f);
    glEnable(GL_DEPTH_TEST);
    glDepthFunc(GL_LEQUAL);
    glHint(GL_PERSPECTIVE_CORRECTION_HINT, GL_NICEST);

    Size sz = GetSize();
    glViewport(0, 0, (GLsizei)sz.cx, (GLsizei)sz.cy);
    glMatrixMode(GL_PROJECTION);
    glLoadIdentity();
    gluPerspective(45.0f, (GLfloat)sz.cx/sz.cy, 0.1f, 100.0f);
    glMatrixMode(GL_MODELVIEW);
    glLoadIdentity();
}

#ifdef GUI_GTK

Image GLCtrl::GLPane::MouseEvent(int event, int x, int y)
{
    p = p - GetScreenView().TopLeft();
    return ctrl->MouseEvent(event, p, event);
}

Vector<int> GLCtrl::Pick(int x, int y)
{
    pane.ActivateContext();
    return picking.Pick(x, y, THISBACK);
}

#endif
```

- # GLCtrl.h
- GLPicking.cpp
- Win32GLCtrl.cpp
- X11GLCtrl.cpp
- GtkGLCtrl.cpp
- GLCtrl.cpp

GLCtrl/GLCtrl.cpp (5)
GLCtrl/GLCtrl.h (137)

File	Line	Message (1 error)
GLCtrl/GLCtrl.cpp	5	error: no 'void Upp::GLCtrl::GLResize(int, int)

- OpenGL
- Core
- CtrlCore
- Draw
- GLCtrl

GLCtrl.h GLCtrl.cpp

Symbol/lineno (Ctrl+C)

All

- GLCtrl

```
#include "GLCtrl.h"

NAMESPACE_UPP
```

2) [3-4.jpg](#), downloaded 1009 times

- OpenGL
- Core
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- Draw
- GLCtrl
- RichText
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- plugin/png
- plugin/z
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- # GLCtrl.h
- GLPicking.cpp
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GLCtrl.h GLCtrl.cpp GtkGLCtrl.cpp

Symbol/lineno (Ctrl+)

All
GLCtrl/GtkGLCtrl.cpp
GLCtrl

GLCtrl/GtkGLCtrl.cpp

- sGIconfig : GdkGLConfig
- EXITBLOCK
- GLCtrl
- GLPaint() : void
- Paint(Draw& w) : void

```

void GLCtrl::GLPaint()
{
    WhenGLPaint();
}

void GLCtrl::Paint(Draw& w)
{
    Size sz = GetSize();

    Ctrl *top = GetTopCtrl();
    if(!top)
        return;

    GtkWindow *gtk = top->gtk();
    GdkWindow *win = top->gdk();

    if(sz.cx <= 0 || sz.cy <= 0 || !win)
        return;

    ONCELOCK {
        sGIconfig = gdk_gl_config_new
    }

    GdkPixmap *pixmap = gdk_pixmap_new
    if(pixmap) {
        GdkGLDrawable *gldrawable = GD
        if(gldrawable) {
            GdkGLContext *glcontext =
            if(glcontext) {
                if(gdk_gl_drawable_gl
                    glVertex(0, 0, s
                    glClear(GL_COLOR_E
                    GLPaint();
                    glFlush ();
                    gdk_gl_drawable_gl

                Rect r = GetScreen
                GtkWidget *widget
                gdk_draw_drawable
    }

```

r/GtkGLCtrl.cpp (23)
GLCtrl.h (34)

File	Line	Message (1 error)
		Linking has failed
		/home/gianni/upp.out/reference/GLCtrl/GCC
GLCtrl/GtkGLCtrl.cpp	38	undefined reference to `gdk_gl_config_new
GLCtrl/GtkGLCtrl.cpp	43	undefined reference to `gdk_gl_drawable_c
GLCtrl/GtkGLCtrl.cpp	43	undefined reference to `gdk_pixmap_set_g
GLCtrl/GtkGLCtrl.cpp	45	undefined reference to `gdk_gl_context ne
GLCtrl/GtkGLCtrl.cpp	47	undefined reference to `gdk_gl_drawable_c
GLCtrl/GtkGLCtrl.cpp	52	undefined reference to `gdk_gl_drawable_c
		collect2: error: ld returned 1 exit status

3) [5-6.jpg](#), downloaded 974 times

- OpenGL
- Core
- CtrlCore
- Draw
- GLCtrl**
- RichText
- plugin/bmp
- plugin/png
- plugin/z
- <prj-aux>
- <ide-aux>
- <temp-aux>
- <meta>

GLCtrl.h GLCtrl.cpp GtkGLCtrl.cpp

Symbol/lineno (Ctrl+L)
All
 GLCtrl/GtkGLCtrl.cpp
GLCtrl

```
void GLCtrl::GLPaint()
{
    WhenGLPaint();
}
```

Package organizer

Description

Optimize for speed Accepts

when	Uses
	CtrlCore
when	Libraries
WIN32 GCC	glaux glu32
LINUX	GL GLU
FREEBSD	GL GLU
GTK	gdkglext-x11

Optimize the file for speed Add to include

Libraries

When LINUX : GL GLU gdkglext-x11-1.0

- # GLCtrl.h
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- Win32GLCtrl.cpp
- X11GLCtrl.cpp
- GtkGLCtrl.cpp
- GLCtrl.cpp

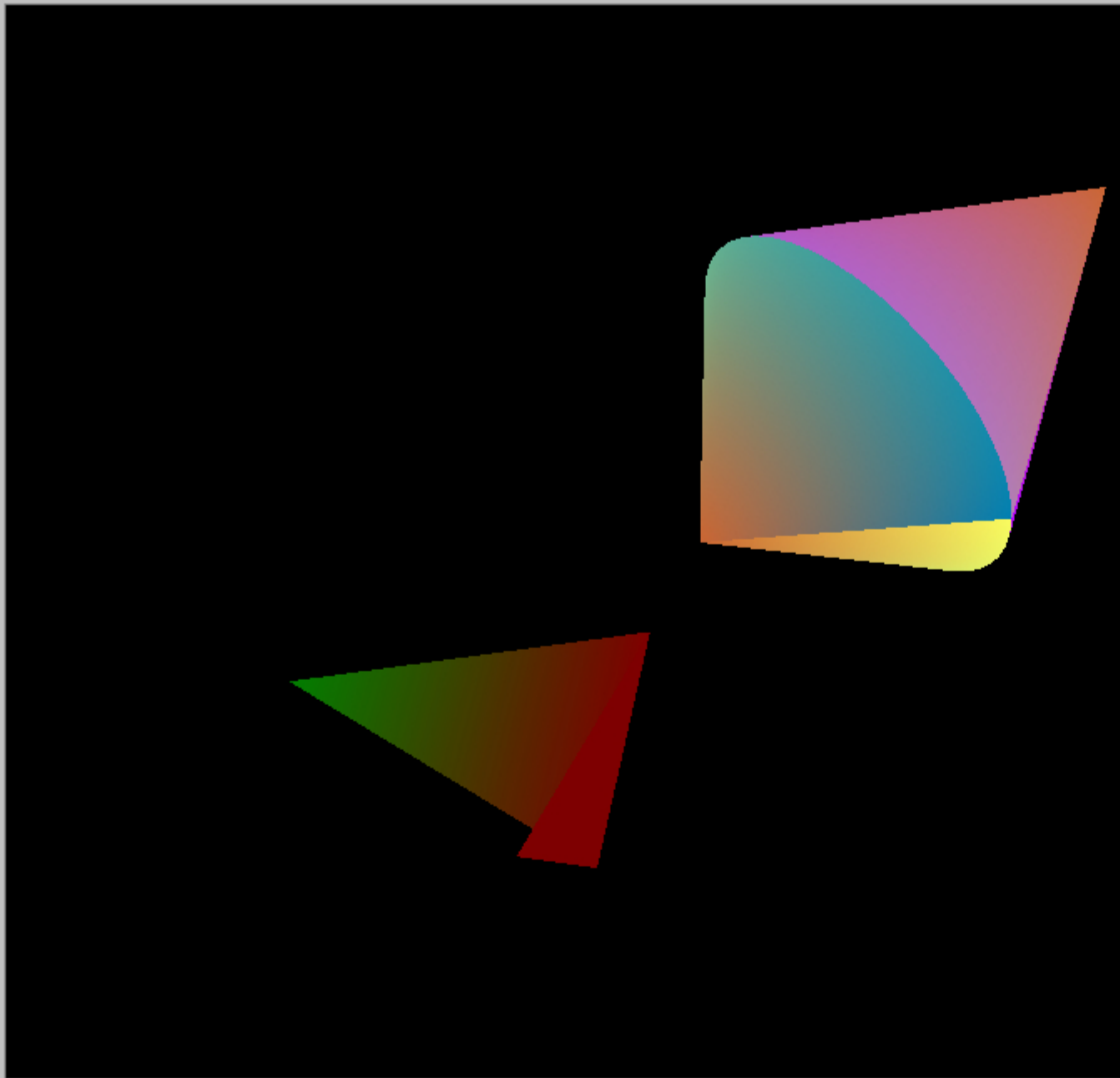
GLCtrl/GtkGLCtrl.cpp	38	undefined reference to `gdk_gl_config_new`
GLCtrl/GtkGLCtrl.cpp	43	undefined reference to `gdk_gl_drawable_c`
GLCtrl/GtkGLCtrl.cpp	43	undefined reference to `gdk_pixmap_set_g`
GLCtrl/GtkGLCtrl.cpp	45	undefined reference to `gdk_gl_context_ne`
GLCtrl/GtkGLCtrl.cpp	47	undefined reference to `gdk_gl_drawable_c`
GLCtrl/GtkGLCtrl.cpp	52	undefined reference to `gdk_gl_drawable_c`
collect2: error: ld returned 1 exit status		

4) [7-8.jpg](#), downloaded 922 times

File Edit Project Build Debug Assist Setup

GUI GCC Debug

- OpenGL
- Core
- CtrlCore
- Draw
- GLCtrl
- RichText
- plugin/bn
- plugin/pn
- plugin/z
- <prj-aux>
- <ide-aux>
- <temp-aux>
- <meta>



main.cpp

```
glPopMatrix();  
t = 13 * point.y;  
float sn = (float)sin(t / 300);  
float cs = (float)cos(t / 300);  
glTranslatef(sn + cs, sn, -6);  
glRotated(t / 12.0, 0, 0, 1);  
glRotated(t / 15.0, 0, 1, 0);  
glRotated(t / 17.0, 1, 0, 0);  
glBegin(GL_TRIANGLE_STRIP);  
    glVertex3f(0.0f, 0.0f, 0.0f);  
    glColor4d(1, 0, 0, 0.5);  
    glVertex3d(-1, 0, 0);  
    glVertex3d(1, 0, 0);  
    glVertex3d(0, 0, 0.97);
```

rl/GtkGLCtrl.cpp (23)

GLCtrl/GLCtrl.h (34)

Subject: Re: GLCtrl for a newbie
Posted by [mirek](#) on Wed, 29 Oct 2014 08:47:26 GMT
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Hi,

thanks for the tutorial.

I have however somewhat unrelated question: Last time, when I was testing Cinnamon, it had a nasty bug when "zoom window on opening" effect was on - theide goes for "maximize window" early on in the code and that used to caught cinnamon WM by surprise, resulting in weird "semistate" when window was 'maximized' but zoomed down.

Have you experienced any such troubles with current version of Cinnamon, or have they fixed it already? (For me this was one of reasons to avoid Cinnamon and go with MATE).

Mirek

Subject: Re: GLCtrl for a newbie
Posted by [giol](#) on Fri, 31 Oct 2014 16:58:51 GMT
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Hi Mirek,

Many thanks to you.

I have to say that only recently I started with Mint Cinnamon 16 after a long period past with Debian.

The new Cinnamon 17 does not seem to have such problems.

In the Cinnamon 16 I encountered problems only with the Welcome plug-in of Qt Creator (see [Link](#))

As you can see in the following pictures, my Cinnamon 17 UWord test doesn't seem to fail:

I'm doing some tests with OCE.

The OCE_Test, after some troubles, finally works.

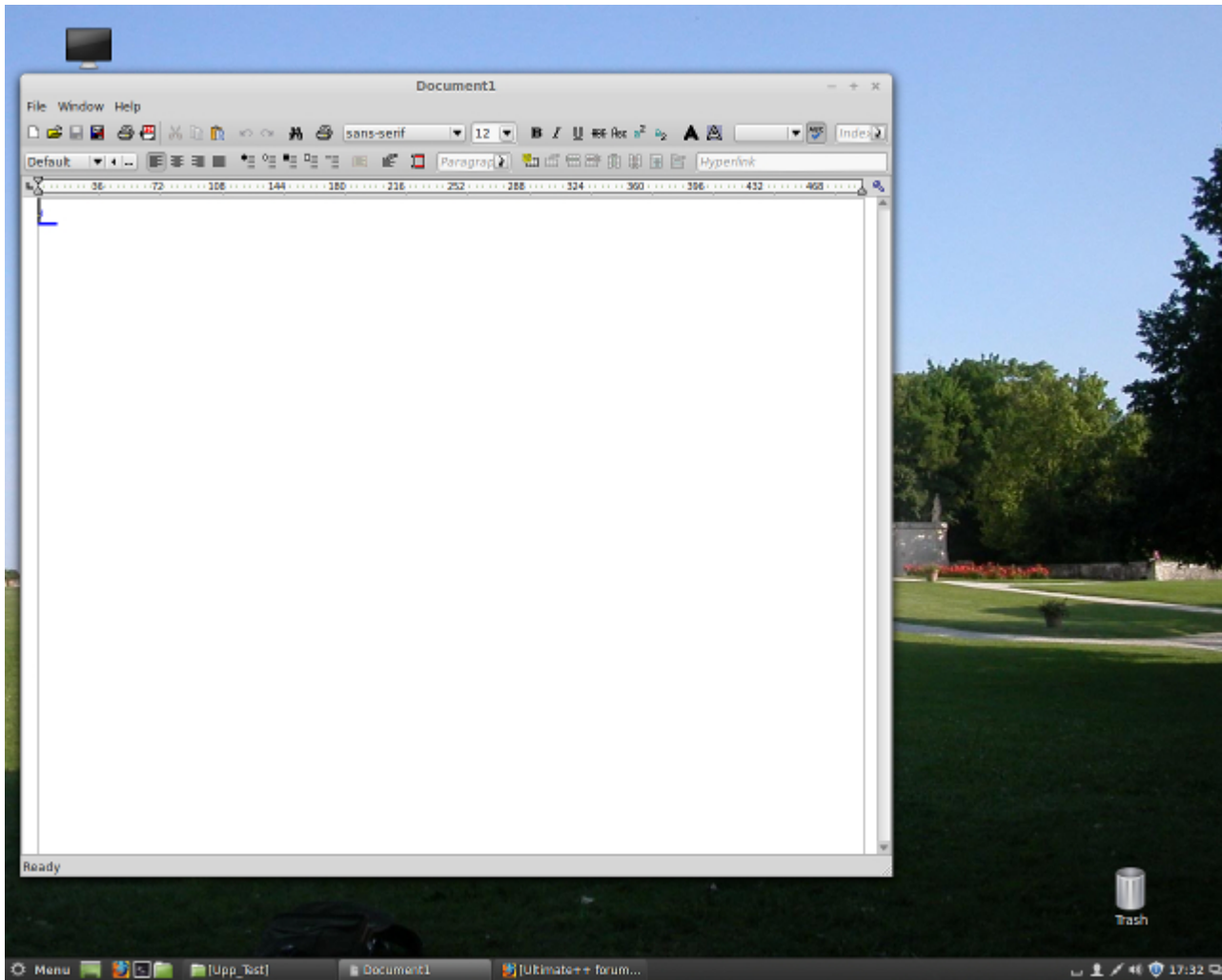
Soon I will let you know my results.

Bye.

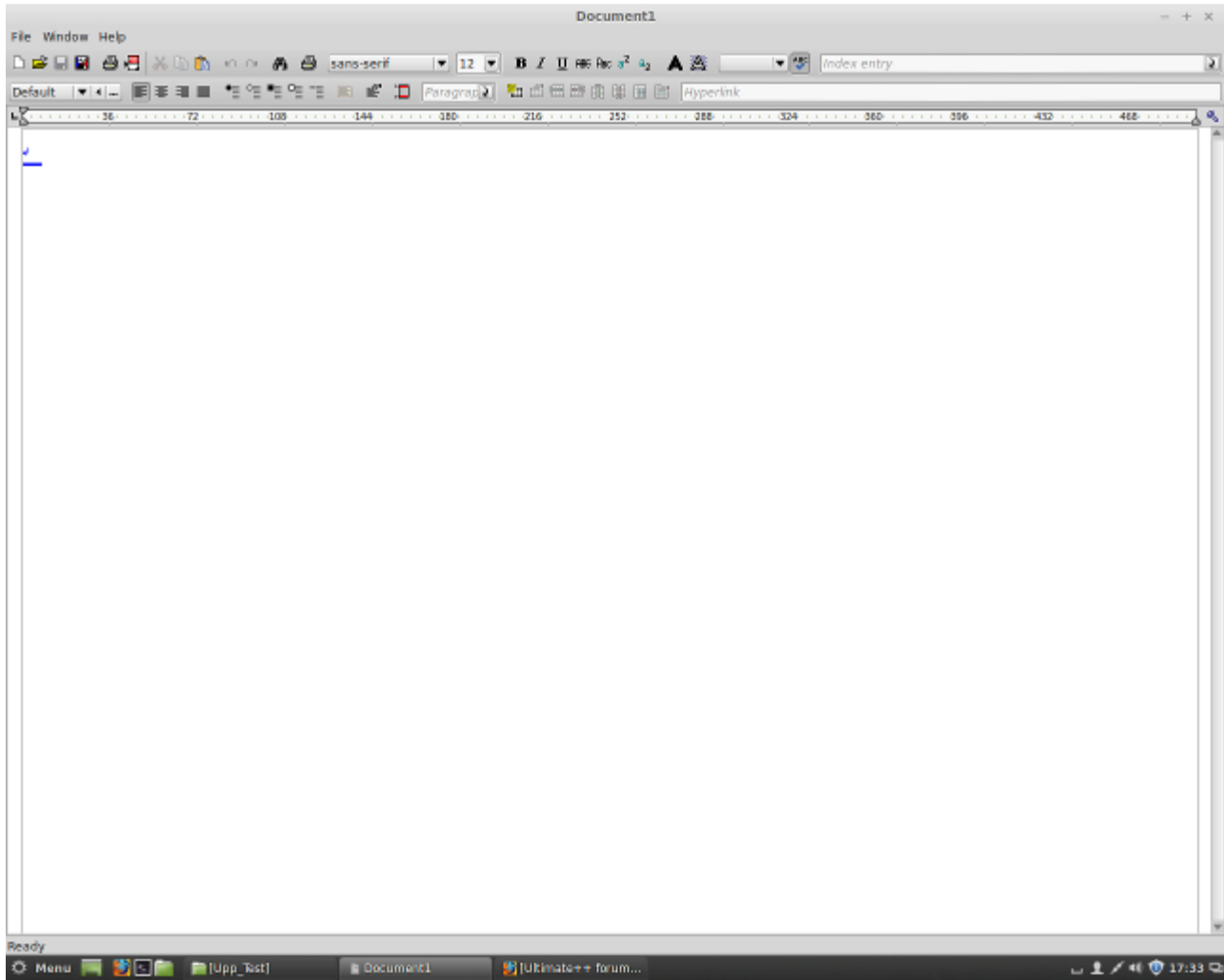
Gio

File Attachments

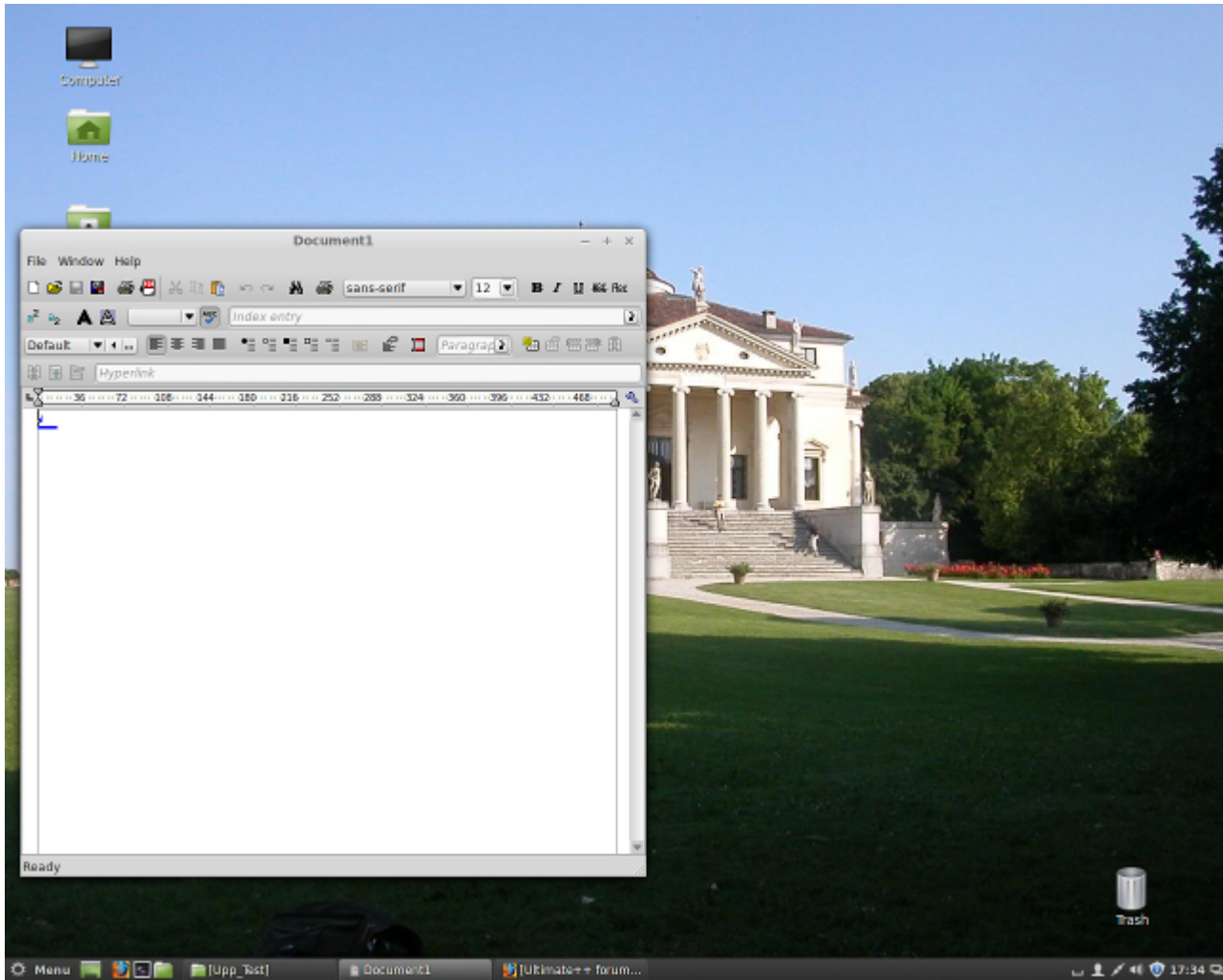
1) [Screenshot from 2014-10-31 17:32:56.jpg](#), downloaded 823 times



2) [Screenshot from 2014-10-31 17:33:15.jpg](#), downloaded 859 times



3) [Screenshot from 2014-10-31 17:34:01.jpg](#), downloaded 856 times



Subject: Re: GLCtrl for a newbie
Posted by [Klugier](#) on Thu, 20 Nov 2014 17:32:01 GMT
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Hello,

Some time ago, I have post compilation issue patch for GTK inspired by your post (It is not on trunk yet). Link: <http://www.ultimatepp.org/redmine/issues/918>. But, GTK OpenGL performance is very bad. Moreover it can lead to graphics artifacts. So, currently it is highly recommended to use X11 backend for OpenGL. How to do that? Screenshot:

OpenGL tested on native linux with Nvidia drivers.

Sincerely,
Klugier

File Attachments

1) [OpenGL-X11.png](#), downloaded 736 times

